




# UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,095	03/30/2004	Masashi Kitabayashi	110859.01	3098
25944	7590	10/07/2004	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			MERLINO, AMANDA H	
			ART UNIT	PAPER NUMBER
			2877	

DATE MAILED: 10/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/812,095	<b>Applicant(s)</b> KITABAYASHI ET AL.	
	<b>Examiner</b> Amanda H Merlino	<b>Art Unit</b> 2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2004.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09/976,142.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's own admission of prior art in view of Ooi et al (4,554,587).

Applicant's own admission of prior art on line 29 of page 1 thru line 4 of page 2 of the specification show of a lens' evolution apparatus comprising: an evaluation sheet with a test pattern wherein light is irradiation from a light source onto the test pattern to the lens, the image light is then projected on a screen and is detected by an image import device using an image sensor. The image is image-processed by a computer to evaluation the lens.

Applicant's own admission of prior art does not teach of the image sensor having a light adjuster.

Ooi et al (4,554,587) teach of an image sensor with a light adjuster.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to provide a light adjuster such as a diaphragm as taught by Ooi et al for the image sensor taught by Kitabayashi et al to adjust the amount of light incident on the image sensor to obtain good image quality as specifically taught by Ooi et al.

Claim 4-6 rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's own admission of prior art in view of Ooi et al as applied to claim 1 above, and further in view of Sprague (3,988,068).

Applicant's own admission of prior art does not teach of a peripheral photo detector.

Sprague et al teach of a peripheral photo detector.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to implement a peripheral photo detector as taught by Sprague et al in order to test the peripheral portions of the lens in order to detect defects of the peripheral portions of the lens which would provide a more accurate and versatile apparatus by providing information on the center of the lens and the outer peripheral of the lens.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-7 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2 and 5-7 respectively of U.S.

Patent No. 6,760,097 in view of Ooi et al (4,554,587). The claims in U.S. Patent No. 6,760,097 show of a lens evaluation method, comprising the steps of: irradiating an image light including a resolution-measuring test pattern onto a screen through a lens to display an image of the resolution-measuring test pattern on the screen; detecting a luminance of the image of the displayed test pattern by an image import device using an image sensor, a resolution evaluation value being calculated based on the detected luminance value; acquiring a background luminance value of a background part without the test pattern being formed by the image import device using the image sensor; acquiring a maximum luminance value in the test pattern image by the image import device using the image sensor; acquiring a minimum luminance value in the test pattern image by the image import device using the image sensor; and calculating the resolution evaluation value based on the background luminance value, the maximum luminance value and the minimum luminance value obtained through the respective steps, wherein the resolution evaluation value (MTF) calculated by the evaluation value calculating step is represented as

$$MTF = (I_{max} - I_{min}) / (I_0 * 2 - I_{max} - I_{min})$$

where the background luminance value is represented as  $I_0$ , the maximum luminance value is represented as  $I_{max}$  and the minimum luminance value is represented as  $I_{min}$ . The claims further show steps of: calculating an input level value based on the background luminance value, the maximum luminance value and the minimum luminance value, wherein the background luminance value acquiring step,

the maximum luminance value acquiring step, the minimum luminance value acquiring step and the input level value calculating step are conducted at a plurality of positions in the projected image; acquiring an illumination at a predetermined first position of the projected image where the background luminance value, acquiring step, the maximum luminance value acquiring step, the minimum luminance value acquiring step and the input level value calculating step are conducted; and calculating an in-plane illumination of the entire projected image by calculating the illumination of a second position other than the first position based on the input level value and illumination at the first position and the input level value at the second position.

The differences between the present claims and the claims in U.S. Patent No. 6,760,09 are that the present claims are apparatus claims and the claims in the U.S. Patent No. 6,760,097 are method claims and the claims in U.S. Patent No. 6,760,097 do not teach of the image sensor having a light adjuster. At the time of the invention, one of ordinary skill in the art would be able to derive the structural limitations of the apparatus claims from the method claim.

With reference to the light adjuster, Ooi et al (4,554,587) teach of an image sensor with a light adjuster.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to provide a light adjuster such as a diaphragm as taught by Ooi et al for the image sensor taught by Kitabayashi et al to adjust the amount of light incident on the image sensor to obtain good image quality as specifically taught by Ooi et al.

***Allowable Subject Matter***

Claims 2-3 and 7 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and upon a filing of a terminal disclaimer to overcome the double patenting rejection.

As to claims 2-3, the prior of record, taken alone or in combination, fails to disclose or render obvious a lens evaluating apparatus comprising a resolution evaluation value calculator that arithmetically operates the resolution evaluation value based on a background luminance value of a part of the check sheet having no test pattern formed thereon, a maximum luminance value and a minimum luminance value in the test pattern image, in combination with the rest of the limitations of claim 1.

As to claim 7, the prior of record, taken alone or in combination, fails to disclose or render obvious a lens evaluating apparatus comprising a resolution evaluation value calculator that arithmetically operates an input level value based on a background luminance, a maximum luminance value and a minimum luminance value in the test pattern image, in combination with the rest of the limitations of claim 1.

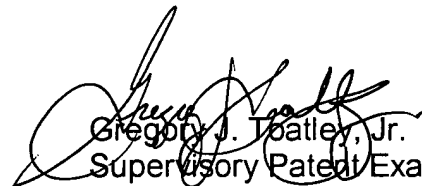
**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amanda H Merlino whose telephone number is 571-272-2421. The examiner can normally be reached on Monday and Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J Toatley, Jr. can be reached on 571-272-2800 ext 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Amanda H Merlino  
Patent Examiner  
Art Unit 2877  
September 9, 2004

  
Gregory J. Toatley, Jr.  
Supervisory Patent Examiner